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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/553,039

10/11/2005

Yasushi Mori

AZU-001

2129

32628

7590

07/14/2009

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EXAMINER

LESLIE, MICHAEL S

ART UNIT

PAPER NUMBER

3745

MAIL DATE

DELIVERY MODE

07/14/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/553,039	<b>Applicant(s)</b> MORI, YASUSHI	
	<b>Examiner</b> MICHAEL LESLIE	<b>Art Unit</b> 3745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/2005, 9/2007</u> .   | 6) <input type="checkbox"/> Other: ____.                          |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Ogura et al (JP 11-334573).

Ogura et al discloses a negative pressure booster comprising at least a valve body which is reciprocally disposed in the inside of a shell, a power piston which is mounted in the valve body and partitions the interior of the shell into a constant pressure chamber into which negative pressure is introduced and a variable pressure chamber into which atmosphere is introduced at the time of operating the negative pressure booster, a valve plunger which is connected to an input shaft and is slidably disposed in the inside of the valve body, a vacuum valve (V2) which controls the communication or the interruption between the constant pressure chamber and the variable pressure chamber, and an atmospheric valve (V1) which controls the interruption or the communication between the variable pressure chamber and at least the atmosphere due to the operation of the valve plunger (Figs. 1, 2), wherein the negative pressure booster further includes a stroke shortening mechanism (42, 46) which shortens a manipulation stroke quantity of the input shaft in an output region with an output larger than a given output than the manipulation stroke quantity of the input shaft in the output region with the output larger than the given output

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when the manipulation stroke quantity of the input shaft is changed at a change rate of the manipulation stroke quantity of the input shaft with respect to the output in an output region with an output equal to or below the given output (Fig. 3). Wherein the stroke shortening mechanism is atmospheric valve opening quantity increasing means which is operated in the output region with the output larger than the given output and increases a valve opening quantity of the atmospheric valve larger than the valve opening quantity during the usual operation, and the operation of the atmospheric valve opening quantity increasing means is controlled in response to pressure corresponding to the input, and the pressure controlling the operation of the atmospheric valve opening quantity increasing means is pressure of the variable pressure chamber. The vacuum valve includes a valve element and a vacuum valve seat (42b) on which the valve element is detachably seated and, the atmospheric valve includes the valve element and an atmospheric valve seat (28a) on which the valve element is detachably seated, and the atmospheric valve opening quantity increasing means includes a valve seat member (42) which has the vacuum valve seat mounted on one end side thereof, wherein the valve seat member is mounted in the valve body movably between a first position which is positioned in the output region with the output equal to or below the given output and a second position which is positioned in the output region with the output larger than the given output, and the movement of the valve seat member is controlled in response to the pressure of the variable pressure chamber, wherein the movement of the valve seat member is controlled in response to the pressure difference between the variable pressure chamber and the constant pressure chamber.

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***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. 7472968, 7334512, and 7201456 each disclose a negative pressure booster having a stroke shortening mechanism.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL LESLIE whose telephone number is (571)272-4819. The examiner can normally be reached on M-F 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look can be reached on (571) 272-4820. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ML  
July 10, 2009

/Michael Leslie/  
Primary Examiner, Art Unit 3745

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